11 BLOODSTAIN PATTERN ANALYSIS – MISCELLANEOUS INTERPRETATION	Page 1 of 2
Division of Forensic Science	Amendment Designator:
BLOODSTAIN PATTERN ANALYSIS TRAINING MANUAL	Effective Date: 15-October-2004

11 BLOODSTAIN PATTERN ANALYSIS – MISCELLANEOUS INTERPRETATION

11.1 Objective

11.1.1 To understand the methodology of Bloodstain Pattern Analysis

11.2 Methods of Instruction

- 11.2.1 Lecture and Discussion
 - 11.2.1.1 Analysis of Bloodstain Patterns from Photographs (see Section 8 of the Bloodstain Procedure Guide)
 - 11.2.1.2 Analysis of Bloodstain Patterns from submitted evidence (other than photographs) (see Section 9 of the Bloodstain Procedure Guide)
 - 11.2.1.3 Analysis of Bloodstain Patterns from Crime Scene Response (see Section 10 of the Bloodstain Procedure Guide)

11.2.2 Literature References

- 11.2.2.1 Ristenbout, R. R., III and Shaler, R. C., "A Bloodstain Pattern Interpretation in a Homicide Case Involving an Apparent Stomping", Journal of Forensic Science, JFSCA, Vol.40 No.1 January 1995 pp. 139 145
- 11.2.2.2 Epstein, B., "Examination of Bloody Clothing", presented at the IABPA Conference at Colorado Springs, 1992
- 11.2.2.3 Sadowski, W. D., "Bloody Latent Print on Fabric: A Capital Murder Case", Indianapolis Marion County Forensic Services Agency, Indianapolis, Indiana, May 20, 1991
- 11.2.2.4 Gifford, W. D., "Bloodstain Survival in Water", Anchorage Police Department IABPA News, September 1999
- 11.2.2.5 Emgbert, R., "Pulverized Bright Green Threads and High Velocity Blood Spatter Unravel the Mystery of a Crime". A Homicide Study with no body, January 15, 1992.
- 11.2.2.6 Yeshion, T. E., "The Forensic Application of Luminol as a Presumptive Blood Test", Florida Department of Law Enforcement. Proceedings of the VI International Symposium of Bioluminescence and Chemiluminescence, Cambridge, September 1990.
- 11.2.2.6 MacDonell, H. L. and Brook, B. A., "Detection and Significance of Blood in Firearms" Legal Medanny. 1977, Vol.1977 pp. 183-199

11.2.3 Training Tools

- 11.2.3.1 Cresap, T. R., "Bloody Bare Footprints What Size Will They Make?", Air Force Office of Special Investigation
- 11.2.3.2 Bevel, T., "A System for Crime Scene Reconstruction", Oklahoma City Police Department

11 BLOODSTAIN PATTERN ANALYSIS – MISCELLANEOUS INTERPRETATION	Page 2 of 2
Division of Forensic Science	Amendment Designator:
BLOODSTAIN PATTERN ANALYSIS TRAINING MANUAL	Effective Date: 15-October-2004
DEOODSTAIN FATTERN ANALISIS TRAINING MANUAL	Effective Date. 13-October-2004

11.2.3.3 A Preliminary Study of "How Fire May Effect Crime Scene Bloodstains", a joint project between the Halifax Regional Forensic Support Section of the Royal Canadian Mounted Police and the Level II Arson Course of the Canadian Investigative Fire School.

11.2.4 Experiments/Evaluation

- 11.2.4.1 Read the article from the Journal of Forensic Sciences (see 10.2.2.1). Perform experiments (with old shoes and jeans). Pour a pool of blood and proceed to step into the pool. Photograph and document the results of staining on shoes and jeans. Now stomp and then later jump into pools of blood. Photograph and document the effects of each action on shoes and jeans. The intensity of these events will be compared and discussed to determine whether or not these type events can create spatter which can be confused with impact and if the presence of bloody shoe impressions are necessary to confirm "stomping". This discussion will be a lead-in to discuss the "Bloody Bare Footprints....." article (10.2.3.1).
- 11.2.4.2 Perform the two exercises included in the packet from "The Crime Laboratory". These exercises will be a lead-in to experimentation and subsequent discussion of "Examination of Bloody Clothing", "Bloody Latent Print on Fabric......", "Bloodstain Survival in Water", and "How Fire May Effect Crime Scene Bloodstains". Bring in an old article of clothes wipe, contact transfer (impress), spatter, and soak stains onto different areas of the cloth article. Photograph and document in writing a description of the result of each stain. Now take a spray bottle and spritz each stain area (with water) at intervals. Photograph and document at each interval until comfortable with an effect and/or an established pattern of disturbance that the spritzing creates. Now take a separate, dry section of material with dried spatter outside to expose it to flame. Document the results.

♦End